volume data are presented. Did they examine the relation of late potentials in the first week to ventricular volume?

AZFAR G. ZAMAN, MD, MRCP
JOHN L. MORRIS, MRCP
JOHN H. SMYLLIE, MD, MRCP
STEPHEN J. LINDSAY, MRCP
J. CAMPBELL COWAN, DPHIL, FRCP
Department of Cardiology
University Hospital of Wales
Cardiff, CF4-4XW Wales
United Kingdom

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Reply

We thank Zaman et al. for their comments. Regarding the timing of recording of late potentials, as they pointed out, the study by El-Sherif et al. (1) predated the thrombolytic era. Other studies have found that late potentials generally do not disappear over time in patients with postinfarction sustained ventricular tachycardia and that the delayed (>30 days) appearance of late potentials is a rather rare phenomenon (2,3). Late potentials recorded up to 2 years after infarction may thus retain or even increase their prognostic significance. Therefore, there is no clear conclusion regarding the optimal timing of recording of late potentials in the reperfusion era. Indeed, the Task Force Committee of the European Society of Cardiology, American Heart Association and American College of Cardiology in establishing standards for analysis of late potentials has stated that "the optimum time for recording the high-resolution ECG has not been defined . . . " (4). In our study, 83% of the patients underwent recording during the 6- to 30-day period, which El-Sherif et al. (1) found to be the most closely associated with arrythmic events. In addition, the difference in the prevalence of late potentials cannot be ascribed to the difference in the timing of recording between the three groups that we compared (median of 11 days in all three groups, range 5 to 390 days).

The role of late potentials as a predictor of arrhythmic events in a thrombolyzed cohort is an important and controversial (5) issue but was outside the scope of our study. Our patients were selected on the basis of acute Thombolysis in Myocardial Infarction grade 3 patency of the infarct-related vessel, and the event rate would be expected to be very low; it is indeed conceivable that in this specific patient subset (with patent infarct-related arteries), late potentials lose their predictive value. The hypothesis that the difference in late potentials between thrombolysis and angioplasty may translate into a difference in arrhythmic events will be tested in a large, randomized study. We wish to point out that we did reference the study by Honhloser et al. (6) (reference 45 in our article). Those authors showed that even in the thrombolysis era, the presence of late potentials is predictive of the occurrence of arrythmic events, although this index was less helpful than patency of the infarct-related artery. The best predictive value for arrhythmias in the postinfarction period was the combination of infarct-related artery patency, left ventricular ejection fraction and late potentials (6). Likewise, the study by McClements et al. (7), cited by Zaman et al. in support of their assumption that there is no relation between late potentials and arrhythmic events in a thrombolyzed cohort, found the opposite. In that series of survivors of myocardial infarction, 68% of whom received thrombolytic agents, the authors concluded that "the signal averaged ECG and left ventricular ejection fraction are each independently predictive of arryhthmic events after myocardial infarction. . . ."

Finally, we did not measure left ventricular volume but only left ventricular ejection fraction, and we therefore cannot examine the interesting hypothesis that the prognostic value of late potentials in the first week is related to left ventricular dilation.

PHILIPPE GABRIEL STEG, MD
CARMA KARAM
JEAN-LOUIS GOLMARD
Cardiologie A
Hôpital BICHAT
46 rue Henri Huchard
75877 Paris Cedex 18, France

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"Prevalence" or "Pretest Likelihood" of Coronary Artery Disease?

We read with great interest the report of Amanullah et al. (1) on the diagnostic efficacy of adenosine sestamibi perfusion single-photon emission computed tomography (SPECT) in women. Detection of coronary artery disease by noninvasive testing is more difficult in women than in men, especially in terms of positive predictive values. One of the causes of this difficulty is the global lower prevalence of coronary artery disease in women (2,3). The authors report a very high performance of adenosine sestamibi myocardial perfusion SPECT in women, and emphasize that these performances are maintained in a group of women with a low pretest likelihood of coronary artery disease.